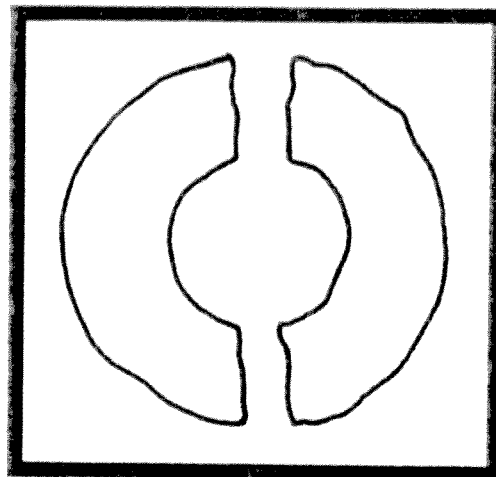


Law of the Donut

What Famous Rule of Donuts Is Illustrated by This Picture?

For the first exercise in each set, find the area of the rectangle. For all other exercises, multiply using the distributive property. Write the letter of the exercise in the box that contains the number of the answer.



S $n + 5$
 $n + 2$

A $(n + 4)(n + 9)$

E $(n - 3)(n + 10)$

W $(n - 6)(n - 5)$

O $(2n + 2)(3n + 8)$

A $(7n + 5)(4n - 1)$

Answers

16 $n^2 + 7n + 36$

22 $n^2 + 7n - 30$

7 $28n^2 - 11n - 5$

10 $n^2 + 7n + 10$

2 $n^2 - 11n + 30$

13 $28n^2 + 13n - 5$

6 $n^2 + 13n + 36$

14 $n^2 + 22n + 30$

20 $6n^2 + 22n + 16$

E $5x + 1$
 $3x + 2$

A $(9x - 2)(4x - 4)$

L $(6x + 1)(3x - 2)$

E $(5x - 4)(2x + 7)$

O $(2x + 5y)(x + 6y)$

H $(4x - y)(9x - 4y)$

Answers

3 $2x^2 + 17xy + 30y^2$

18 $36x^2 - 20xy + 4y^2$

7 $18x^2 - 9x - 2$

19 $36x^2 - 25xy + 4y^2$

4 $18x^2 + 27x - 2$

15 $10x^2 + 27x - 28$

9 $15x^2 + 13x + 2$

8 $10x^2 - 44x - 28$

17 $36x^2 - 44x + 8$

M $t^2 + 4t - 3$
 $t + 2$

T $(2t - 3)(3t^2 + 2t + 5)$

K $(4t + 1)(2t^2 - 7t + 2)$

H $(3t - 4)(2t^2 - t - 5)$

L $(8t - 3)(t^2 + 2t + 9)$

V $(5t + 2)(4t^2 - 3t - 10)$

Answers

11 $8t^3 - 26t^2 + 60t - 27$

21 $8t^3 + 13t^2 + 66t - 27$

1 $6t^3 - 5t^2 + 4t - 15$

16 $20t^3 + 13t^2 - 50t - 20$

12 $t^3 + 6t^2 + 5t - 6$

8 $20t^3 - 7t^2 - 56t - 20$

4 $6t^3 - 5t^2 + 8t + 20$

14 $8t^3 - 26t^2 + t + 2$

5 $6t^3 - 11t^2 - 11t + 20$

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
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What Did the Carpenters Call Their Bass Quartet ?

Simplify each expression. Assume that no divisor equals zero. Find your answer in the set of answers under the exercise and cross out the box above it. When you finish, the answer to the title question will remain.

1	$\frac{6x+9}{3} = \frac{6x}{3} + \frac{9}{3}$	6	$\frac{12v^5 - 27v^4}{3v^2}$	11	$\frac{8a^3 + 4a^2 - 24a}{4a}$
2	$\frac{18x^2 - 50}{2}$	7	$\frac{30u^4 - 6u}{-6u}$	12	$\frac{21ab^3 + 14a^2b + 35a^4}{7a}$
3	$\frac{12x^2 + 20x}{4x}$	8	$\frac{u^2v + uv^2}{uv}$	13	$\frac{2a^3b - 6a^2b^2 + 16ab^3}{-2ab}$
4	$\frac{20x^3 + 5x^2}{5x}$	9	$\frac{8uv^4 - 14u^2v^3}{2uv}$	14	$\frac{45a^2b^4 - 60a^3b^2 - 15a^2b}{15a^2b}$
5	$\frac{2x^3 - 7x^2}{x^2}$	10	$\frac{-10u^3v^2 + 5u^2v^5}{-5u^2v}$	15	$\frac{15a^5b^4 + 3a^4b^5 - 6a^3b^6}{3a^2b^3}$

A	4	T	O	S	H	2	N	E	B	8	T	A	L	U	R	O	B	E	A	S	4	N
$2x - 7$	$3x + 5$	$4x^2 + 5$	$2x + 3$	$4x^2 + x$	$3x - 25$	$9x^2 - 25$	$4v^3 - 7uv^2$	$2uv - 5v$	$4v^3 - 9v^2$	$u + v$	$4v^3 + 2v$	$2uv - v^4$	$-5u^3 + 1$	$2a^2 - a - 1$	$3b^3 - 4ab - 1$	$3b^3 + 2ab + 5a^3$	$-a^2 - 4ab + 1$	$2a^2 + a - 6$	$3b^3 - 3ab - 8b^2$	$5a^3b + a^2b^2 - 2ab^3$	$5a^3b + a^2b^3 - 4ab^2$	$-a^2 + 3ab - 8b^2$